JUN 2 1 2006 W

PTO/SB/17 (12-04v2) Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004. 10/661,831-Conf. #7713 Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). Application Number September 12, 2003 FEE TRANSMITTAL Filing Date First Named Inventor Qing Hu For FY 2005 **Examiner Name** Not Yet Assigned Applicant claims small entity status. See 37 CFR 1.27 2828 Art Unit TOTAL AMOUNT OF PAYMENT 101328-0178 100.00 Attorney Docket No. METHOD OF PAYMENT (check all that apply) x Check Credit Card Money Order None Other (please identify): Deposit Account Number: 141449 Deposit Account Name Nutter McClennen & Fish LLP Deposit Account For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below, except for the filing fee Charge fee(s) indicated below Charge any additional fee(s) or underpayment of Credit any overpayments fee(s) under 37 CFR 1.16 and 1.17 **FEE CALCULATION** 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES** SEARCH FEES **EXAMINATION FEES** Small\_Entity Small Entity Small Entity **Application Type** Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Fee (\$) Fee (\$) Utility 300 150 500 250 200 100 200 100 50 100 130 65 Design Plant 200 100 300 150 160 80 300 500 250 600 300 Reissue 150 Provisional 200 100 O 0 2. EXCESS CLAIM FEES **Small Entity** Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 200 100 Multiple dependent claims 360 180 Fee Paid (\$) Multiple Dependent Claims **Total Claims Extra Claims** Fee Paid (\$) Fee (\$) Indep. Claims Fee Paid (\$) Extra Claims Fee (\$) 100.00 × 100.00 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Extra Sheets Number of each additional 50 or fraction thereof Fee Paid (\$) **Total Sheets** Fee (\$) (round up to a whole number) x - 100 = 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): SUBMITTED BY Registration No. 43.810 Telephone (617) 439-2000 Signature (Attomey/Agent) Reza Mollaaghababa Name (Print/Type) Date

Fee Transmittal

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, ip an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: June 19, 2006

Signature:

\_(Reza Mollaaghababa)

IFW

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Dated: Tue 19,2006 Signature:

/(Reza Mollaaghababa

Docket No.: 101328-0178

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Qing Hu et al.

Application No.: 10/661,831

Confirmation No.: 7713

Filed: September 12, 2003

Art Unit: 2828

For: TERAHERTZ LASERS AND AMPLIFIERS

BASED ON RESONANT OPTICAL PHONON SCATTERING TO ACHIEVE POPULATION

**INVERSION** 

Examiner: Van Roy, Tod Thomas

## RESPONSE

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action issued on March 24, 2006 in the above-referenced patent application, Applicants provide the following remarks. Reconsideration and allowance are respectfully requested.

A Listing of Claims begins on Page 2.

Remarks begin on Page 10.

06/21/2006 EAREGAY1 00000044 10661831

01 FC:2201

100.00 OP